

## United States Patent and Trademark Office

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

| APPLICATION NO.      | FI       | LING DATE  | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|----------------------|----------|------------|----------------------|---------------------|------------------|
| 09/691,420           |          | 10/17/2000 | Kenji Ikeda          | 2933SE-92           | 4307             |
| 22442                | 7590     | 05/07/2004 |                      | EXAM                | INER             |
| SHERIDA<br>1560 BROA |          | PC         | CRUZ, LOURDES C      |                     |                  |
| SUITE 120            |          |            |                      | ART UNIT            | PAPER NUMBER     |
| DENVER,              | CO 80202 | 2          |                      | 2827                |                  |

DATE MAILED: 05/07/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

| `  | Application No.   | Applicant(s)   |
|--|---|--|
|  | 09/691,420  | IKEDA ET AL.   |
| Office Action Summary  | Examiner  | Art Unit   |
|  | Lourdes (Elle) Cruz   | 2827   |
| The MAILING DATE of this communication app<br>Period for Reply   | pears on the cover sheet with the c   | orrespondence address  |
| A SHORTENED STATUTORY PERIOD FOR REPL THE MAILING DATE OF THIS COMMUNICATION.  - Extensions of time may be available under the provisions of 37 CFR 1.1 after SIX (6) MONTHS from the mailing date of this communication.  - If the period for reply specified above is less than thirty (30) days, a repl - If NO period for reply is specified above, the maximum statutory period - Failure to reply within the set or extended period for reply will, by statute Any reply received by the Office later than three months after the mailin earned patent term adjustment. See 37 CFR 1.704(b). | 136(a). In no event, however, may a reply be tin<br>ly within the statutory minimum of thirty (30) day<br>will apply and will expire SIX (6) MONTHS from<br>a, cause the application to become ABANDONE | nely filed s will be considered timely. the mailing date of this communication. D (35 U.S.C. § 133). |
| Status   |   |  |
| 1) Responsive to communication(s) filed on 17 C  | October 2000.   |  |
| <u> </u>   | s action is non-final.  |  |
| 3) Since this application is in condition for alloward closed in accordance with the practice under I  |   |  |
| Disposition of Claims  |   |  |
| 4) Claim(s) 1-7 is/are pending in the application. 4a) Of the above claim(s) is/are withdra 5) Claim(s) is/are allowed. 6) Claim(s) 1-7 is/are rejected. 7) Claim(s) is/are objected to. 8) Claim(s) are subject to restriction and/o  |   |  |
| Application Papers   |   |  |
| <ul> <li>9) The specification is objected to by the Examine 10) The drawing(s) filed on 17 October 2000 is/are Applicant may not request that any objection to the Replacement drawing sheet(s) including the correct 11) The oath or declaration is objected to by the Example 11.</li> </ul>   | : a) ☐ accepted or b) ☒ objected<br>drawing(s) be held in abeyance. See<br>tion is required if the drawing(s) is obj  | e 37 CFR 1.85(a).<br>ected to. See 37 CFR 1.121(d).  |
| Priority under 35 U.S.C. § 119   |   |  |
| a) Acknowledgment is made of a claim for foreign a) All b) Some * c) None of:  1. Certified copies of the priority document 2. Certified copies of the priority document 3. Copies of the certified copies of the priority document application from the International Burea * See the attached detailed Office action for a list  | is have been received. Is have been received in Application rity documents have been received u (PCT Rule 17.2(a)).   | on No<br>ed in this National Stage   |
| Attachment(s)  |   |  |
| <ol> <li>Notice of References Cited (PTO-892)</li> <li>Notice of Draftsperson's Patent Drawing Review (PTO-948)</li> <li>Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br/>Paper No(s)/Mail Date 10.</li> </ol>  | 4) Interview Summary Paper No(s)/Mail Da 5) Notice of Informal P 6) Other:  | •  |

## **DETAILED ACTION**

## **Drawings**

The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the claimed length that is more than the length of the cavity and a width that is less than the width of the cavity, and the color filter stuck on the chip must be shown or the features canceled from the claims. No new matter should be entered.

A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

## Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-7 are rejected under 35 U.S.C. 102(b) as being anticipated by Tanaka (US4710797).

Tanaka discloses (See cover Figure):

(Claims 1 and 4) A package structure having a solid-state image sensor chip 4 and a color filter stuck on a light receiving surface of the chip (see that the chi is EPROM and part of light sensitive structure/device), the package structure comprising: a vessel (15) for packaging the solid state image sensor chip; an

Application/Control Number: 09/691,420

Art Unit: 2827

optically transparent protection plate (14) attached to the vessel to cover the light receiving surface of the chip; and a resin layer (13) arranged between the chip and the protection plate to absorb light having a predetermined wavelength (Col. 2, lines 60+).

(Claims 2,5) The package structure above wherein the resin layer absorbs light having a wavelength shorter than the wavelength of visible light (Col. 2, lines 60+).

(Claims 3,6) The package above wherein the vessel includes a cavity having a predetermined length and width to receive the chip (see that the claims define that the cavity is as big as it is required by the chip), the protection plate having a length that is that is greater than length cavity and a width that is less than the width of the cavity (see that 14 is not as wide as the cavity required by the chip. Also see that 14 is as long as the encapsulant which is inherently longer than the chip, hence 14 is longer than wider than the cavity REQUIRED by the chip).

(Claim 7) The image sensor package above wherein the protection plate 14 is fixed to the vessel (to the sides of 14) so as to form a gap between the protection plate and the cavity (filled by 13), the resin layer being partially exposed by the gap (See that the resin is exposed in as much as the claims specifies what exactly it is that the resin is exposed to; for example see that the prior art's resin is exposed to the chip, the chip pad 11, the sides of 15, and the plate 14).

Application/Control Number: 09/691,420 Page 4

Art Unit: 2827

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Lourdes (Elle) Cruz whose telephone number is (571) 272-1928. The examiner can normally be reached on M-F 6:30-3:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kammand Cuneo can be reached on (571) 272-1957. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Elle Cruz

Examiner Art Unit 2827

Lourdes (Elle) Cruz

SUPERVISORY PATENT EXAMINER TECHNOLOGY CENTER 2800